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## ABSTRACT

The Volunteers in School (VIS) program, a three-year intervention using nonprofessionals as change agents and service providers, was designed to help children identified by their teachers as having behavioral or academic difficulties. An attempt was made to coordinate the teacher's classroom activities with those of the change agent and to devise individualized instructional strategies. To assess the impact of the VIS program on the children, the teachers, and the school, a multivariate assessment strategy was used with a pre-post control-group design. The outcomes for the children appeared to be closely related to the organizational response to the program and to the nature of teacher involvement. By the end of the third year, only one of the three targeted schools remained actively involved in and supportive of VIS. Teachers in the other two schools were overtly antagonistic to VIS personnel. When the staff became actively involved in the intervention, students made larger gains than in previous years, an indication of the impact of organizational change. (Author/CS)

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School-based Secondary Prevention Programs, Organizational  
Adoption and Systemic Change

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## School-based Secondary Prevention Programs, Organizational Adoption and Systemic Change

Prevention has been a key concept in the evolution of Community Psychology with activity directed toward the implementation of programs and interventions intended to reduce the incidence and/or duration of a variety of "problems in living". Among these interventions the secondary prevention strategy introduced by Caplan (1964) is perhaps the most prevalent model. For example, Cowen's Primary Mental Health Project (Cowen, Gesten & Wilson, 1979) and Spivack and Shure's (1974) program of problem solving for "disadvantaged" preschoolers are both examples of this strategy. The efficacy of secondary prevention is predicated on the assumption that early identification and subsequent intervention may prevent the development of more serious problems for those individuals targeted. While few long term follow-up studies have been completed assessing the preventive efficacy of these types of interventions, the data available typically indicates a dissipation of positive outcomes resulting from the intervention programs. Certainly the problems of generalization of effect and the maintenance of change are neither new nor unique to community based interventions, however given the serious concern for prevention among community researchers these problems are particularly salient.

A growing awareness of the importance of ecological factors and role relationships within a setting has led to an increased concern with accomplishing organizational or systemic change to enhance the longevity of individual behavior change and provide more primary prevention for those yet to enter the system. A common strategy for bringing about these organizational changes through prevention programs has been to involve the setting's primary service providers (e.g., teachers and staff) in the intervention such that the

intervention activities become an integral part of the organization's operation. Such an adoption or integration of the intervention activities might presumably lead to systemic change in the organization and as such, primary prevention.

Today I'd like to discuss some of the outcomes of a secondary prevention program intended to precipitate change at both the individual level and the more systemic level of the school as an organization. The findings described here are part of a three year school-based secondary prevention program (VIS, Volunteers in School) utilizing nonprofessional college students as change agents and service providers. (Seidman, Rappaport, Davidson & Linney, in preparation). Primary school children identified by their teachers as displaying academic and/or behavioral difficulties in the classroom were randomly selected to be included in the intervention. Each child was assigned a college student change agent who worked with the child on individualized activities designed for the unique needs and skills of the child. In each successive year of the three year period increasing attention was directed toward coordinating the teacher's classroom activities with those of the college students and devising personalized intervention strategies for the children that included the teacher and classroom time. While the initial intent of the program was to prevent the development of further academic deficiencies and school-based behavior problems for the children identified, the need to include the teachers and classroom activities as part of the intervention became increasingly obvious, as did the importance of more systemic, organizational change in the classroom setting in order to enhance the probability of primary prevention for subsequent groups of children. What is discussed here is the organizational response to the intervention and the degree of "radiating impact" (Kelly, 1971) apparent at both the individual and organizational levels.

Procedure. Throughout the three years of the VIS program each college

student worked with two children for approximately three hours a week per child. In the first year of the intervention the college students worked relatively independently with their targeted child outside of the classroom setting. The activities might best be described as tutoring, modeling, and the nonspecifics of friendship. The classroom teacher was involved in these relationships only in nonsystematic and somewhat random ways.

During the second year of the VIS program college student activities were quite similar to those of the first year while teacher involvement was systematized and actively solicited. The college students met monthly with each of the child's teachers to discuss progress, establish goals and determine appropriate strategies to accomplish the desired changes. The college students were regularly encouraged by project staff to share with the teachers their own experiences and report of activities with the child and request the teacher's use of specific practices in the classroom during the remainder of the school day. These activities included for example, the use of a reward system, use of more individualized reading materials and more individual attention by the teacher to the child.

We assumed that both the formal and informal exchange of information occurring in these first two years would facilitate teacher participation in the VIS and that teachers' behavior and expectations toward the targeted children would be affected by their participation. As will be discussed further below, classroom teachers were differentially involved in the VIS program with only a few actively collaborating with the college students.

The third year of the VIS intervention required teacher participation in the program and was actively directed toward teacher adoption of intervention activities and change in teacher-student relationships and interaction

patterns. In order to attain more control over the degree of teacher involvement, the teachers participating in VIS were required to enroll in a graduate course offered by VIS through the University Extension School. All of the teachers involved with the VIS during this year were aware of the course requirement and volunteered to participate. The class met in the school building, tuition was waived, and each teacher received 8 semester hours credit for a year's participation with the option of enrolling in 8 additional hours of coursework at the University, also tuition free. The class met weekly in groups of approximately 10 people including teachers and the college students working in their classrooms. During these meetings the target children were discussed and collaborative intervention activities were designed to meet the needs of the particular child considered and accomplish mutually determined goals. The meetings offered an opportunity to discuss broader issues in early education and strategies for dealing with the diversity and range of individual differences in a single classroom. The project staff led the meetings and actively directed discussion toward the consideration of in-class activities both useful to the teacher and requiring the teacher's participation.

Assessment. To assess the impact of the VIS program both for the individuals targeted and for the school as an organization, a multivariable assessment strategy was adopted with a pre-post control group design. In each year four schools were involved in the program, two as intervention schools and two as control schools. In Year 3 of VIS, three schools were involved in the intervention and a fourth served as a control school. Within the intervention schools, from the pool of referred children in first and second grade, 48 children each year were randomly selected for the intervention group with the remainder forming an in-school control group. Every child in the first two

grades in each of the four schools was assessed at the beginning of the intervention period (January in Year 1, and September in Years 2 and 3) and at the end of the academic year when the intervention ended. The assessment battery administered individually to each child included the Wide Range Achievement Test in reading and arithmetic (Jastak, Bijou & Jastak, 1965), The Peer Behavior Description Form (PBDF) and the Self Behavior Description Form (SBDF) (Seidman, et. al., 1979). The PBDF is a measure of aggressive, prosocial, anxious and loner behavior in peer nomination format. The SBDF while designed to parallel the structure of the PBDF yields two clusters of self rated behavior, one reflecting prosocial behavior and the second negative school behaviors. Additionally, the classroom teacher completed the Teacher Behavior Description Form (Seidman, et. al., 1979) for each child in their classroom. This measure yields three component scores paralleling the PBDF, aggressive, prosocial and anxious-withdrawn behavior. This assessment battery provides multiple converging measures of classroom behavior from teachers, peers and the individual child.

Results and Discussion. The data from this program has been examined to address two primary questions: 1) to what extent is the intervention effective in improving the performance and behavior of the targeted children as compared with a control group, and 2) to what extent is there evidence of radiating impact and organization change related to the intervention. A variety of multivariate and univariate analyses were employed to examine these questions.

While the outcomes for targeted children and the apparent efficacy of the program is not consistent across the years, the individual level outcomes (i.e., for experimental and control children) appear to be closely related to

the organizational response to VIS and the nature of teacher involvement in the program. As mentioned earlier, the teachers in each of the intervention schools became differentially involved in the program. During the first year essentially all of the school personnel were enthusiastic and supportive of the program. Post intervention satisfaction measures and teacher comments indicated their desire to have the program continue in their school and their belief that VIS was instrumental in individual changes. In the second year of VIS as teacher involvement was more actively solicited, the support and enthusiasm began to wane in one of the two experimental schools. In fact enthusiasm dampened to such an extent that almost half of the teachers in this school chose not to participate in the following year.

During the third year of VIS the format of meetings and supervision allowed for the greatest degree of teacher input and the teachers volunteering to participate were eager to work with the college students and seemed excited by the potential of this new format. In this third year an additional school was included in the intervention. These teachers seemed to see participation almost as a reward for their having served as a control group for the two previous years. By the end of this third year however, only one school remained actively involved and supportive of VIS. The teachers in the other two schools were actually quite antagonistic toward VIS personnel. Although not overtly hostile throughout the year a pattern of resistance and estrangement was evident in a variety of passively aggressive actions, e.g., exclusion of VIS staff from the teacher's lounge, scheduling other meetings and appointments (such as a haircut) for the class meeting time, and bringing other work to the class such as grading papers, preparing tests or making flash cards. The markedly



different reactions by staff in each of these schools were curious given the initial enthusiasm among all.

The analysis of organizational radiating impact offer some parallel findings. Over the three years there is evidence of systemic impact in only one School. Significantly it is the school in which the staff became most actively involved in the intervention, were most likely to incorporate intervention activities into classroom routine, and remained enthusiastic throughout the three year period. The analyses of individual target change during the three year period indicate that only during the first year of the program did the target group outperform the control group. In the second year there were no differences between the groups, and in the third year the control group equalled or bettered the performance of the experimental group.

Considering the overall pattern of change it appears that as the intervention attempted to affect more of the school setting and move from secondary prevention to primary prevention, or from individual level change to organizational level change, resistance was encountered in two of the three schools and neither the individual nor the organizational changes desired were accomplished. In School 1 however, during the third year there is indication of some degree of organizational change and the individual students made larger gains than in previous years.

What variables can account for these differential responses and what are the implications for cross-level intervention impact? Considering empirical changes, anecdotal data and post hoc analysis of organizational priorities and values suggests that cross level effects may be achieved when three conditions are present: 1) the desired or expected outcomes between levels (i.e., individual and organization) are not realized and a new or alternate equilibrium

is sought within the organization, 2) the caregivers in the setting have a degree of autonomy from organizational and institutional constraints allowing them to adopt innovations and role redefinitions, and 3) the essence of the desired changes and intervention activities are not inconsistent with or antagonistic to the prevailing organizational priorities of the setting.

The schools involved in VIS differed on these issues. School 1 was a kind of "throw away" school for the district administration having the lowest achievement levels of any school in the system. Clearly the desired relationship or equilibrium between individual outcomes and organizational practices was not being realized. Teachers in this school were concerned about the performance of their students and wanted change. Most felt they needed new ideas, new strategies and new input. These teachers and the school as an organization were seeking alternatives. In the other two schools mean performance levels were slightly below the desired levels, but the range of performance indicated they taught some of the top students in the district. The performance of these students in some sense validated the organization and its operation, consequently there was little perceived need for change. Those not doing well were seen to be individually deficiated and for these schools the appeal of VIS seemed to be provision of auxilliary personnel to work with the "slower" students.

School 1 then provided a setting desiring or needing change. These conditions created a great deal of autonomy for the organization staff (i.e., teachers) that allowed them to adopt some types of organizational change. The district administration essentially allowed them free rein to "do the best they could". As such the dysfunctional relationship between individual and organizational levels created a loosening of organization-institutional level

constraints. While this easing occurred in School 1, the teachers in the other two schools frequently referred to administrative pressures to improve reading scores on standardized tests, improve discipline and classroom order. It appeared that institutional level demands determined to some degree the priorities and activities of the staff in these schools, while the relaxing of higher level demands for School 1 permitted alternatives.

While organizational flexibility and readiness for change may be prerequisite to cross-level interventions, the content of the intervention must be compatible with the organization's priorities and the "culture of the school" (Sarason, 1971). The intent of the Year 3 VIS was to expand the range of acceptable classroom behavior and encourage pedagogic style based on more personalized teaching and learning. Whether from necessity or choice the staff in School 1 shared these values and had adopted a variety of activities consistent with this philosophy. Despite the absence of other conditions in Schools 2 and 3, the program intent was incompatible with the prevailing values of the setting. Rather than supporting diversity in the classroom, these schools were more likely to value standardization and similarity as goals.

Organizational adoption of intervention programs remains a salient concern for community researchers. Interventionists typically report obstacles to implementation and adoption of alternative programs, resistance to organizational change, and the modification of programs following the termination of the researcher's involvement. If systemic change and primary prevention are to become viable goals, more attention need be directed toward the implementation process and mechanisms operative in both systems maintenance and systemic change. It is clear that adoption of an intervention by a system does not

insure multiple level change within the system. When cross-level, systemic change is desired interventions need be designed to assure change in the inter-level linkages maintaining the system. This necessitates a broader, ecological perspective for examining the social systems targeted for change, and greater specification of the processes of change anticipated so that the ecological compatibility of the intervention and the setting might be determined.

- Caplan, G. Principles of Preventive Psychiatry. New York: Basic Books, 1964
- Cowen, E. L., Gesten, E. L., & Wilson, A. B. The Primary Mental Health Project (PMHP): Evaluation of Current Program Effectiveness. American Journal of Community Psychology, 1979, 7, 293-304.
- Jastak, J. F., Bijou, S. W., & Jastak, S. R. Wide Range Achievement Test. Wilmington, Delaware: Guidance Associates, 1965
- Kelly, J. G. The quest for valid preventive interventions. In G. Rosenblum (Ed.), Issues in Community Psychology and Preventive Mental Health. New York: Behavioral Publications, 1971.
- Sarason, S. B. The culture of the school and the problem of change. Boston: Allyn & Bacon, 1971.
- Seidman, E., Linney, J. A., Rappaport, J., Herzberger, S., Alden, L., & Kramer, J. Assessment of classroom behavior: A multiattribute, multi-source approach to instrument development and validation. Journal of Educational Psychology, 1979, 71, 451-464.
- Seidman, E., Rappaport, J., Davidson, W. S., & Linney, J. A. Changing Human Service Systems: Interventions with children, adults, and the elderly. In preparation.
- Spivack, G. & Shure, M. B. Social adjustment of young children. San Francisco: Jossey-Bass, 1974.